

Serial Number: 09/311,254

Docket Number: 10990419-5

REMARKS

Upon entry of this Response, claims 1, 2, 5-8, 11-14 and 17-24 remain pending in the present application. Claims 1, 7, and 13 have been amended herein. Applicant requests reconsideration of the pending claims in view of the following remarks.

As an initial matter, in items 5, 6, and 7 of the Office Action, claims 1-2, 5-6, 7-8, 11-12, 13-14, and 17-24 have been objected to for various informalities as noted. Claims 1, 7, and 13 have been amended herein to address the objections noted. Accordingly, Applicant requests that the objection to claims 1-2, 5-6, 7-8, 11-12, 13-14, and 17-24 be withdrawn.

In item 9 of the Office Action, claims 1-2, 5-8, 11-14, and 17-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent 5,999,664 issued to Mahoney (hereafter "Mahoney") in view of the Ulead PhotoImpact 3.0 User Guide, Ulead Systems (1996, pp. 90-93, 162-173), (hereafter "Ulead"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP § 2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q2d 1955, 1956 (Fed. Cir. 1993). Applicant asserts that the cited combination of Mahoney and Ulead fails to show or suggest all of the elements of claims 1-2, 5-8, 11-14, and 17-24. Accordingly, for the reasons that follow, Applicant respectfully requests that the rejection of claims 1-2, 5-8, 11-14, and 17-24 be withdrawn.

Claim 1 as amended states in part:

"a selection interface for selecting at least one of the predefined data types for further processing;

a processing pipeline identifier ***configured to identify at least one processing pipeline to process each of the regions comprising one of the predefined data types selected in the selection interface***, wherein for each respective one of the regions, the processing pipeline identifier identifies a processing pipeline from a plurality of processing pipelines to process the respective one of the regions based upon the predefined data type of the respective one of the regions, and based upon a predetermined destination application; and

the processing pipeline identifier being further configured to combine the regions processed by the at least one processing pipeline and to provide the combined regions processed by the at least one processing pipeline to the predetermined destination application."
(Emphasis added)

Serial Number: 09/311.254

Docket Number: 10990419-5

It is noted that claims 7 and 13 include elements similar in scope with those of claim 1 recited above. With respect to claim 1, the Office Action states:

"Moreover, Mahoney teaches a selection user interface for identifying set of features for search and further processing based upon a request by an application program-destination application-selection request (col. 8, lines 1-50, col. 16, line 47, col. 17, line 67, col. 34, lines 1-167, FIG. 6, 9-10, 12-14). Mahoney fails to explicitly disclose: pipeline identifier identifies a processing pipeline from a plurality of processing pipelines to process the respective one of the regions based upon the predefined data types selected in the selection interface, wherein the processing pipeline is identified to process each of the regions based upon the predefined data type of each of the regions, respectively, and based upon a predetermined destination application. However, photoimpact teaches an acquire submenu which allows for the requiring for an image document. The document is scanned in several post-processing functions-pipelines-are performed on different parts of sections of the document, such as the removal of excess blank space in the image document using an "auto-crop" feature-pipeline-, eliminating interference patterns from a photo in the document using "auto-remove moiré" feature-pipeline-etc.. After these features or functions are applied, then the photo impact application displays the document sent from the acquire process – combined regions processed by the at least one part processing pipeline and to provide combined regions processed by at least one processing pipelines to the predetermined destination application (page 163, lines 3-30, page 165, post proc. options). However, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the teachings of Mahoney and photo impact and have identified one of the pipelines, because this would provide the benefit of automatically enhancing the image to correct basic image problems using powerful enhancement features (page 165, post proc. option).

Applicant respectfully disagrees. As an initial matter, Applicant points out that the statement in the Office Action that "pipeline identifier identifies a processing pipeline from a plurality of processing pipelines to process the respective one of the regions based upon the predefined data types selected in the selection interface" does not reflect the current state of claim 1 reproduced above as was previously amended. In addition, Ulead states as follows on pages 163-164:

"After selecting your TWAIN source you can acquire an image by clicking the Acquire Image button on the Standard toolbar or by choosing the Image command in the File: Acquire submenu. This opens the Acquire Image dialog box which allows you to specify the destination, calibration, and post processing options for the acquired image. You can choose to set these options before

Serial Number: 09/311,254

Docket Number: 10990419-5

acquiring an image or you can acquire an image directly by pressing the Acquire button in the Acquire Image dialog box. Doing so opens the TWAIN driver and displays a dialog box containing your device's imaging options. For more information on specific imaging options, see your image device's documentation or on-line help.

NOTE: *If you click the Acquire button and you do not have a TWAIN device installed, you will see an error message. If you do have a TWAIN device, but it is incorrectly installed, a dialog box appears containing configuration options.*

Setting the destination

The destination options in the Acquire Image dialog box allow you to send your imported images directly to any, or all, of the following destinations:

- **New Image** opens an acquired image in its own image window in the PhotoImpact workspace.
- **File** stores an acquired image in the PhotoImpact workspace. Click the Filename button to specify the filename and location. Filenames must end with a number, allowing PhotoImpact to save multiple images by auto-numbering the files. This is especially useful when you want to store multiple pages of a document for optical character recognition (OCR) at a later time.

Note: *After entering a filename, it is displayed in the Acquire Image dialog box underneath the File destination option.*

- **Printer** sends an acquired image to be printed on your PC's default printer. This destination option makes it easy for you to turn your PC system into a high quality copy machine. Click the Setup button to specify the printer options.
- **Fax/Mail** sends an acquired image to either your PC's fax device or to your mail software. This option operates in the same manner as the Send command in the File menu and makes it easy to scan in handwritten text and images and send them off as a fax or as an e-mail attachment. Click on the Setup button to access the Send dialog box.

Note: *For more information on the Send Mail dialog box, see "Sending images by electronic mail" p. 80."*

In addition, on page 165, Ulead states:

"Post-Processing Options

The post-processing options in the Acquire Image dialog box allow you to automatically apply several basic but powerful enhancements to an acquired image automatically. These post-

Serial Number: 09/311,254

Docket Number: 10990419-5

processing enhancements analyze and modify an acquired image to correct basic image problems, improving the image's appearance. The following post-processing options can be applied by selecting the appropriate checkbox.

- **Auto-straighten** straightens out an image that is acquired in a crooked, or skewed, manner.
- **Auto-crop** removes excess blank space in an image, cropping an image down to the smallest rectangle containing relevant image data.
- **Auto-remove moiré** eliminates interference patterns and other scan artifacts from an image that has been half-toned, such as photographs in a magazine or book.
- **Adjust brightness & contrast** optimizes the brightness and contrast levels in an image by stretching pixel values across a full range of 256 levels.
- **Add frame & shadow** adds a frame, shadow, and canvas border to an image. Click the Settings button to specify the various framing options.

When the Image is acquired each of the selected post-process options are applied automatically before the image is displayed in the workspace.

Note: *For more information on the first four post-processing options, see "Automatically enhancing an image", p. 90."*

As described above, the Ulead article merely discusses the processing of an entire document including all of the regions included therein. As set forth in claim 1 above, the present patent application provides for a processing pipeline identifier configured to identify at least one processing pipeline to process each of the regions that **comprise one of the predefined data types selected in the selection interface**. In this respect, a user may select a number of data types by virtue of the selection interface and then only those regions on the document that comprise one of those selected data types is processed. Ultimately this provides for a much faster document processing. Specifically, if a document includes text and a True Color Photo, but one selects only "text" in the selection interface, then only the text in the document is processed, thereby avoiding any delays that would be incurred in the processing of the True Color Photo which may actually take much more time than the processing of the text. As such, a user is thus provided with the ability to select those types of data appearing on scanned documents that they wish to process, thereby avoiding an unnecessary waiting for the types of data that were not selected and are presumably not important to the user.

Serial Number: 09/311.254Docket Number: 10990419-5

Ulead merely discusses a processing system in which all of the regions of a particular document are processed. Ulead does not show or suggest the concept of processing only regions that comprise a selected data type. The post processing options described on page 165 in Ulead are automatically applied to the entire image or document without regard for any selected regions by a user. In this respect, Ulead teaches away from selecting the specific region types for processing given that the entire document is processed each time.

In addition, given that Ulead teaches processing an entire document, Applicant asserts that Ulead teaches away from the combination with Mahoney which describes a searching function based upon document type.

For the foregoing reasons, Applicant asserts that the rejection of claims 1, 7, and 13 is improper. Accordingly, Applicant requests that the rejection of claims 1, 7, and 13 be withdrawn. In addition, Applicant requests that the rejection of claims 2, 5-6, 8, 11-12, 14 and 17-24 be withdrawn as depending from claims 1, 7, or 13.

In addition, claim 19 states:

19. The system of claim 1, further comprising a user interface that displays the digital document, wherein only ones of the regions comprising one of the predefined data types selected in the selection interface appear in the displayed version of the digital document.

Claims 20 and 21 include subject matter similar in scope with that of claim 19 above. With respect to claims 19 and 20, the Office Action states that such claims are "directed towards a computer system for implementing the system found in claims 1-6, 1 and 1, respectively, and therefore are similarly rejected." (Office Action, page 5). With respect to claim 21, the Office Action states that claim 21 is "directed toward a method for implementing the system found in claims 1-2, 2, 6 and 1, respectively, and therefore are similarly rejected." (Office Action, page 5).

Applicant respectfully disagrees with the statements in the Office Action regarding claims 19-21. Specifically, claim 19 specifies a user interface that displays the digital document, where only regions that comprise one of the predefined data types selected in the selection interface actually appear in the displayed version of the digital document. In this respect, the document is displayed with less than its full content when scanned, where the user selected the content to be processed and displayed. This subject matter is additive to the subject matter of claims 1, 7, and 13 from which claims 19, 20, and 21 depend. Applicant fails to see how such claims

Serial Number: 09/311,254Docket Number: 10990419-5

are directed to "a computer system for implementing the system" found in previous claims from which they depend.

Thus, Applicant asserts that the Office Action fails to show or suggest a reference as teaching the elements set forth in claims 19, 20, and 21. Accordingly, Applicant requests that the rejection of claims 19, 20, and 21 be withdrawn.

CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,



Michael J. D'Aurelio
Reg. No. 40,977

D'Aurelio & Mathews, LLC
96 Church Street
Chagrin Falls, Ohio 44022
Phone: (440) 729-7450
Fax: (440) 729-7465